Amendments to the Claims: (this listing replaces all prior versions):

1. (currently amended) An apparatus comprising:

a base unit for coupling to a telephone line; and

a remote unit for communicating with the base unit over a wireless medium;

wherein the base unit includes a transmitter for direct analog modulation of an original analog voiceband data signal received over the telephone line and transmitting the modulated signal over the wireless medium, and level control circuitry coupled to the transmitter that controls a level of the original analog voiceband data signal to be substantially in a linear range of the transmitter; and

wherein the remote unit includes a receiver for receiving the modulated signal over the wireless medium and direct analog demodulation of the original analog voiceband signal, and an interface to a modem circuit for decoding a data stream encoded in the original analog voiceband signal.

2-3. (cancelled)

4. (previously presented) The apparatus of claim 1, wherein the level control circuitry that controls a level of the signal comprises an automatic gain control circuit that controls a peak level of the signal.

5. (previously presented) The apparatus of claim 4, wherein the automatic gain control circuit uses a dial tone of a telephone connection or a DC current of a telephone loop to set a gain level for the original signal at a beginning of communication, the gain level remaining substantially constant during communication.

6. (previously presented) The apparatus of claim 1, wherein the data signal is transmitted over a radio channel using multi-level frequency shift keying (FSK) modulation.

7. (previously presented) The apparatus of claim 1, wherein the remote unit is in communication with the base unit and a computer, the remote unit receiving an original voiceband data signal from the computer, generating an RF modulated signal based on the original signal from the computer, and transmitting the RF modulated signal to the base unit.

8. (previously presented) The apparatus of claim 7, wherein the remote unit includes an RF transmitter and an RF receiver, the remote unit establishing wireless communication with the base unit, the remote unit communicating with the base unit by wireless communication via an RF transmitter and RF receiver, and the remote unit communicating with the computer via a wired link.

9. (previously presented) The apparatus of claim 1, wherein

the base unit includes a ring detector coupled to the telephone line for detecting a ring signal on the telephone and providing a ring indication signal to the transmitter for transmission over the wireless medium to the remote unit; and

the remote unit includes a ringer emulator coupled to the receiver for receiving the ring indication signal and emulating a ring signal on a telephone interface.

10. (previously presented) The modem of claim 7, wherein the remote unit includes a switch for selecting a type of medium over which to transmit and receive the data signal.

11. (currently amended) A modem comprising:

a base unit; and

a remote unit for transmitting directly analog modulated original analog data signals to, and receiving directly analog modulated original analog data signals from the base unit, the remote unit including a switch for selecting a type of medium over which to transmit and receive the analog data signals between the base unit and the remote unit, and circuitry for triggering the switch in response to detecting the type of medium coupling the base unit and the remote unit.

12. (original) The modem of claim 11, wherein the type of medium comprises a wired medium.

13. (original) The modem of claim 11, wherein the type of medium comprises a wireless medium.

14. (cancelled)

15. (previously presented) The modem of claim 11, wherein the circuitry comprises a line presence indicator; and

wherein the switch is triggered to operate the modem in wired mode when the line presence indicator detects the wired medium and the switch is triggered to operate the modem in wireless mode when the line presence indicator does not detect the wired medium.

16. (currently amended) A communication interface comprising:

a base unit including an interface for coupling to a telephone line and a transceiver for communicating over a wireless medium, the transceiver including a transmitter for sending signals over the wireless medium and a receiver for accepting signals from the wireless medium; and

a modem interface including a transceiver for communicating with the base unit over the wireless medium and an interface to a modem circuit;

wherein the base unit includes a hybrid circuit for passing original analog voiceband data signals between the telephone line and the transceiver via direct analog modulation, and includes a gain control circuit for controlling a level of the original analog voiceband data signals passing from the hybrid circuit to the transmitter to be substantially in a linear range of the transmitter.

17. (currently amended) A communication method comprising:

at a base unit,

accepting from a telephone line an original analog voiceband data signal encoding a data stream,

controlling a level of the analog voiceband data signal to be substantially in a linear range of a transmitter, and

performing direct analog modulation of the original analog voiceband data signal for transmission over a wireless medium; and

at a remote unit,

performing direct analog demodulation of the original analog voiceband data signal,

echo canceling the demodulated original analog voiceband data signal to attenuate echoes of signals transmitted from the remote unit to the base unit, and

decoding the data stream from the echo cancelled analog voiceband data signal.

18. (currently amended) The method of claim 17 wherein the base unit passes the original analog voiceband signals between the telephone line and the remote unit without performing echo cancellation on the original analog voiceband signals.

19. (previously presented) The method of claim 17 wherein the base unit introduces at least some echo of analog voiceband signals passing from the remote unit into analog voiceband data signals sent to the remote unit.

20. (previously presented) The apparatus of claim 1 wherein the remote unit further comprises a modem circuit coupled to the remote unit.

21. (currently amended) The apparatus of claim 20 wherein the modem circuit includes an echo canceller for reducing echoes on the demodulated original analog voiceband data signal and a CODEC for decoding the original analog voiceband data signal.